

COLMAN'S



Established 1848.

ST. LOUIS, THURSDAY, JANUARY 31, 1884.

No. 5, Vol. XXXVII.

Sorgo Department.

National Sugar Growers' Association.

OFFICERS FOR 1884.

President—Norman J. Colman, St. Louis, Mo.
Vice Presidents—Capt. R. Blakely, Minnesota; D. F. Kenner, Louisiana; N. K. Stout, Kansas; A. Furnas, Indiana; C. F. Clarkson, Iowa; A. J. Decker, Wisconsin; A. E. Williams, New York; Dr. E. F. Newberry, Ill.
Secretary—F. K. Gillespie, Edwardsville, Ill.
Treasurer—J. A. Field, St. Louis, Mo.

Now is the time for those having first class seed for sale to advertise it. It should be thoroughly cleaned and its germinating qualities tested.

L. W. O., of Norborne, Mo., wants to know how J. C. B., of Virgil City, Mo., fixed his furnace so as to burn bagasse.

We have a splendid country here for raising cane, and want some one to start a central factory for sirup and sugar. Some of the citizens held a meeting and we found they could raise all the cane wanted, but we haven't the capital to put into the works.

I must have the RURAL WORLD, enclosed find renewal. Had 50 acres cane last summer but no sirup, lost all by frost; but shall plant 50 acres more next spring—and await results. I grind my cane by water power, have a 20 foot evaporator and can make sirup rapidly.

Hunt, Wisconsin.

I made 1600 gallons sirup last season—1100 custom and 500 for myself from 5 acres. The cane was headed out, but no seed—none of it tested higher than 7 B. It has sold readily at 50c. per gal. We must have a variety that will ripen earlier. I think we have not given enough attention to early ripening seed for this latitude. Notwithstanding the early frost I shall try again.

Our readers will notice that Hon. Seth H. Kenner, of Morris-town, Minnesota, advertises Early Amber cane seed for sale in our columns. It will be remembered by many that he sent two barrels of sirup to the first convention held in St. Louis, and that one of them gratulated almost solid sugar ere the meeting took place. This was the sugar swung out by the late Mr. Hedges and exhibited with so much enthusiasm by him at that time. Mr. Kenner has preserved his seed in its purity.

J. C. B., of Virgil City, Mo., is informed that I know nothing about a "honey" centrifugal. I said hand centrifugal (the printer is responsible for the honey), I also said White Liberator not "Siberian." I deference to Mr. Frazier's plan, of Vernon Co. Wis., to whom I am very much indebted for valuable assistance. The process is described in last year's report of the Wisconsin cane growers. I finish in the perpetual evaporator. Now will J. C. B., please describe his bagasse furnace in particular detail, so that I can build one like it.

COL. COLMAN: I see in the last issue of the RURAL WORLD, that several parties advertise Early Amber cane seed for sale. I wish to know whether seed grown in Missouri or Kansas, will make a good crop and mature in this latitude, (43 1-2 deg.) about the same as Milwaukee, Wis. The cane crop here was all killed by the early frosts before the seed matured. Will it be safe to plant Southern grown corn and cane seed?

Alaska, Michigan.
R. S. J.
Amber cane, or any of the varieties of Northern cane grown in Missouri or Kansas, will grow well if properly planted, in Michigan. The seed in this latitude ripens well, and if properly handled, cannot fail to grow well planted anywhere on this continent. Southern grown corn, that is the dent varieties, will probably not ripen in Michigan, it being in a latitude too far north.

Unable to attend the Convention, I want to get the report of the proceedings as soon as published. I made 2,400 gallons of sirup last fall and a little dough sugar, and want to know which machinery I want to enable me to make sugar.

I raised two kinds of seed last year, the Amber and the Orange, and want now to get the best. There will be a great deal of cane raised in our county next year, and I shall have to enlarge my works.

What will be the cost of a steam engine sufficient to run a mill? Please give me the information asked for, and oblige

Aux Vasse, Mo.

If our friend will follow the experience on our first page, he will get the information asked for, particularly if he consult the advertising columns and write the manufacturers.

We paid out for sugar and molasses, says the Iowa Homestead, in 1883, \$136,415.116. Our gold and silver product for the same year was \$78,600,000. We have full confidence that a proper encouragement to the sorghum interest would enable America to raise its own sugar. If the drain on our resources for sugar was stopped it would turn the balance of trade so largely in our favor that America would speedily become a creditor nation and draw to it the balances of the civilized world.

Members of the National Sugar Growers' Convention.

We present herewith, the names of the members of the National Sugar Growers' Convention, arranged by States, giving also their post-office address. Some few of them were not present. The list represents the best northern sugar cane workers in the United States, and some of the best farmers in the world.

DISTRICT OF COLUMBIA.

Prof. H. W. Wiley, Washington.

ILLINOIS.

H. E. Conflans, Blue Mound.
H. V. Smith, Bunker Hill.
W. H. Hartshorn, Buckley.
C. D. Hartshorn, Buckley.
John Heaney, Buckley.
J. G. Herron, Carrollton.
G. W. Gere, Champaign.
H. A. Weber, Champaign.
O. C. Gibbs, Chicago.
Dr. B. V. Rice, Chicago.
John B. Thoms, Chicago.
John F. Wolf, Chicago.
L. Wolf, Chicago.
B. Bonas, Conlerville.
J. G. Kenower, Clematis.
Prof. C. M. Schwarz, Edwardsville.
W. C. Schwarz, Edwardsville.
F. K. Gillespie, Edwardsville.
A. E. Windsor, Havana.
John M. Neisler, Irving.
John Lowe, Johnsonville.
S. E. Gardner, Leroy.
Wm. Keller, Liberty.
R. M. Keerns, Milo.
W. Barg. Casey, Mt. Vernon.
J. L. Baldwin, Neoga.
W. D. Hills, Olin.
C. W. Thomas, Pesotum.
John V. Tyler, Pinckneyville.
Louis Trefts, Pinckneyville.
H. L. John, Penrose.
W. F. McQuaid, Swanwick.
S. J. Cross, Shiloh Hill.
Robert Kirkwood, Sparta.
Wm. Colby, White Hall.
J. M. Thomas, Wyoming.

INDIANA.

Dr. A. Furnas, Danville.
Prof. W. T. Barbee, Lafayette.
E. W. Deming, Lafayette.
IOWA.

Prof. I. N. Muncey, Ames.
J. L. Stemmons, Avilla.
J. L. Bozarth, Cedar Falls.
C. Bozarth, Clinton.
N. J. Brown, Elberon.
Dr. O. B. Jennings, Fort Dodge.
R. A. Hayes, Linton.
S. M. Poland, Sandusky.
John Stuart, Traer.
A. S. Folger, Washington.
John Wilde, Washington.
J. N. Willson, Washington.

KANSAS.

Jas. K. Mayberry, Chase.
Dr. E. G. Minnick, Ellsworth.
Prof. Magnus Swenson, Hutchinson.
Fred. E. Simpson, Lawrence.
F. E. Wilder, Lawrence.
A. E. Sample, Lyons.
R. S. Cornish, Oswego.
Jos. Lawson, Ricksberry.
L. H. Coburn, Seneca.
Prof. E. B. Cowgill, Sterling.
W. P. Clement, Sterling.
Isaac T. Goodnow, Sterling.
H. L. Goss, Sterling.
Prof. M. A. Scovell, Sterling.
B. M. Sandys, Sterling.
Yates Douglass, Solomon Rapids.
O. Ellison, Topeka.
X. K. Stout, Troy.

LOUISIANA.

T. W. Nicol, Norborn Hope.
Edward J. Gay, New Orleans.
Jas. F. Giffen, New Orleans.
Henry Studniczka, New Orleans.
Adam Thomson, New Orleans.
Gov. H. C. Warmoth, Lawrenceville.
R. J. Walker.

MISSOURI.

Jacob Hendershott, Beverly.
Prof. S. M. Tracy, Columbia.
Henry Eschbaugh, Hanover.
F. W. Henry, Highwood.
J. J. Davis, Maple Grove.
Geo. C. W. Belcher, St. Louis.
C. D. Chase, St. Louis.
A. J. Child, St. Louis.
A. M. McClenny, St. Louis.
Norman J. Colman, St. Louis.
C. D. Colman, St. Louis.
P. M. Kieley, St. Louis.
Alex. McGee, St. Louis.
David L. Reid, St. Louis.

MICHIGAN.

Daniel Root, Hudson.

NEBRASKA.

John B. Bingham, Kearney.
T. S. Clarkson, Lincoln.
Prof. H. Culbertson, Schuyler.
B. V. Ransom, Salem.

NEW JERSEY.

Hon. James Bishop, Trenton.

NEW YORK.

M. Day, Jr., Buffalo.

OHIO.

H. Norton, Cincinnati.
Nelson Maltby, Geneva.
Dr. James Wilhelm, Milford.
F. M. Roll, McGonigle Station.
Thos. McQuiston, Rising Sun.
John F. Orison, Sidney.
Harrison Gordon, Waynesville.

PENNSYLVANIA.

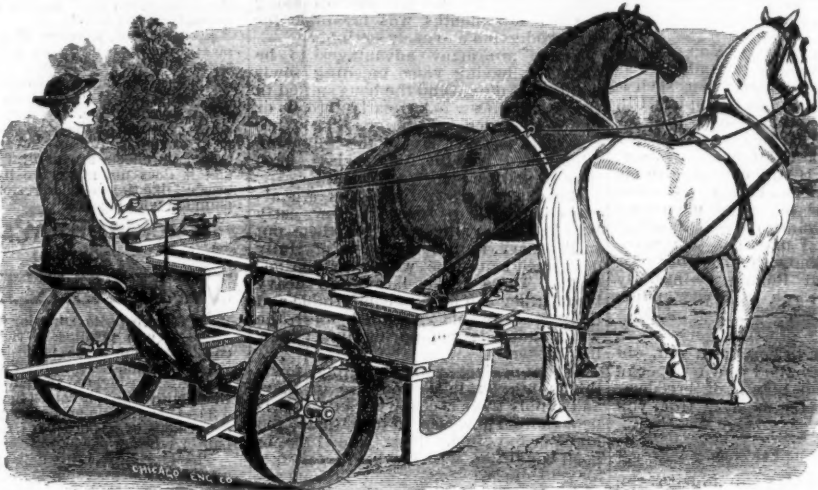
R. L. Stebbins, Mostertown.

TENNESSEE.

N. Saunders, Chattanooga.
Capt. G. W. Gifford, Nashville.
Thos. Gibson, Spring Hill.
E. A. Grigsby, Trenton.

WISCONSIN.

Wm. Frazier, Escopa.
A. J. Russell, Janesville.
Prof. Henry, Madison.
O. S. Powell, River Falls.
Jacob Shoemaker, West Salem.



BARNES' WIRE CHECK ROWER. Manufactured by the CHAMBERS, BERING, QUINLAN CO., Decatur, Illinois.

Cane in Central Iowa.

EDITOR RURAL WORLD: The soil and climate in central Iowa are eminently adapted to the cultivation of cane, just as much so, indeed, as to corn. My Early Amber planted 23d May, ripened before frost, and not only made a nice sirup, but yielded 130 gallons to the acre. To the surprise of many, moreover, it granulated to a very great extent soon after it was milled and was better than any of the refined sirups offered on the market, not only containing no poisonous drugs but having very much of a maple sirup taste.

What we need is a large or central factory for the manufacture of sugar and Des Moines is a good location, having all the railroad facilities necessary for shipping to or from. If we build a factory similar to that at Champaign, Ill., there is no doubt of its paying a large per cent on the investment and have numerous smaller factories for 20 to 30 miles around to work up the cane. There is no doubt but that the farmers of the United States and the manufacturers can grow and work up all the sugar required in this country without any importation of foreign goods. O. S. T. Jewell Junction, Iowa.

From New York.

EDITOR RURAL WORLD: Last season I established a plant for making sirup from northern cane, consisting of new buildings and machinery throughout, with a capacity of about one hundred gallons per day, and worked it last fall under very discouraging circumstances. The season was very wet and the cane very poor and backward; still quite immature when frost came upon it. I made, however, some quite nice sirup, preferred by nearly all my patrons, to the best they can buy of the dealers.

Notwithstanding the discouraging results, I judge from present prospects, that ten times as much will be planted next season as last.

I look for some valuable and interesting information through the report of the Association just held in your city, to be published in the RURAL WORLD.

I enclose a dollar to renew my subscription.

Several who undertook to raise cane in this vicinity, failed to get a stand, through covering the seed too deep, which failures might have been avoided had they been readers of your "Sorgo Department," and heeded what they read.

W. J. BRADY.
Oswego, Co., N. Y., Jan. 21st, 1884.

Southern Iowa.

ED. RURAL WORLD: Seeing my old friend, A. S. Folger, has opened his pen, I thought I would "toot my little flute" in a low key, as an amateur only should. Last spring before starting a sirup factory at this place (with sugar in the dim future) I visited fourteen small factories in Southern Iowa and learned as much as a small head would hold in two weeks' time. But this one thing fixed itself in my mind, only experts should use lime in purifying sirup. We planted 10 acres of cane and got the neighbors to plant 30 more. But lo! a bad spring came and killed it all. We replanted our own, and went out and replanted with our own planter, team and seed, till we secured 30 acres. Then came the early frost, before we had crushed a stalk. But we went on and made 2,550 gallons of sirup, and have sold it all at 65c. a gal.—except 300 gallons that has gone to sugar, so we will have to shovel it out of our tank and reduce it again to sirup. We crush with a 10-horse engine, and throw the exhaust from engine under a steam purifier; draw from purifier into a Folger, Wilde & Co.'s Covered Evaporator. We think it the "best evaporator out." Draw into cooler and put it in a cool, dark cellar, to keep it from sugaring. But we find the hotter the fire, the faster you cook the juice, the fairer or lighter the sirup. As things went crooked last year, we only got to use our bagasse burner 2 days. It rained all fall. This winter we are preparing a large quantity of wood, split very fine and dried in our crush-room. If we don't get bagasse, we will have fine, dry wood and coal, that makes a hot fire.

L. P. W.

Belle Plain, Iowa, Jan. 16.

New York Cane Growers at Geneva, Feb. 6 and 7, 1884.

PROGRAMME:

WEDNESDAY—Morning Session at 10 o'clock.

Early History of our Association.—R. A. Goodrich.

Early History of Cane Sugar Industry.—P. B. Bishop.

Report on Statistics.—C. J. Reynolds, J. F. Knapp, B. D. Gilbert.

Appointment of the Committee for the Session.

AFTERNOON SESSION at 1:30 o'clock.

Our first Year with Sugar Cane.—Dr. E. Louis Sturtevant.

Report on Seed and Varieties of Cane.—J. McKee, C. L. Bigelow, J. McMillan.

Report on Planting and Cultivation.—F. E. Spaulding.

Our Sugar Interests.—T. D. Curtis, Ed. "Farmer & Dairyman."

EVENING SESSION at 6:30 o'clock.

Adaptations of Sirup and Sugar.—C. L. Hoyt, Pa.

Report on Manufacture and Defecation.—S. H. Kinsey, J. D. Palmer and J. B. Whiting.

Northern Cane Sugar Making.—Prof. H. A. Weber, Champaign, Ill.

THURSDAY—Morning Session at 9 o'clock.

Election of Officers and Necessary Business.

Obstacles to Sugar Making.—C. J. Reynolds.

Report on Buildings and Machinery.—C. J. Hoyt, J. M. Clark, W. F. Kinsey.

Profits of N. Cane as Compared with Other Field Crops.—J. A. Field, Ed. "Defecator," St. Louis.

AFTERNOON SESSION at 1:30 o'clock.

Sugar Can be Made Profitably by a Skillful Farmer in a Small Way.—Prof. F. L. Stewart, author of "Sugar Made from Sorghum and Maize."

Report of Sale of Sugar and Sirup.—J. M. Murray, J. J. Larson, C. H. Thorpe.

The Northern Cane Industry.—N. J. Colman, Ed. "Rural World," St. Louis.

C. J. Reynolds, A. G. Williams, Secretary.

Westmoreland, Jan. 15, 1884.

Sorghum Sugar in Japan.

—The sugar of Japan, says Consul Gen. Van Buren, is made from that species of the sorghum plant known as the Chinese sorghum. It grows luxuriantly in all the southern portions of the empire north of the thirty-sixth degree of north latitude. The whole product of the empire in 1878 was 64,297,380 pounds. Importation in 1878 was 67,434,805 pounds. For three or four hundred years the processes of granulating and refining sugars have been known and practiced. Sorghum is not grown, as with us, from the seed, but from cuttings. In September selected stalks are cut and buried in trenches a foot deep. Through the winter, from each joint of the stalks sprouts grow. In the spring these points are cut off and set out in rows fifteen to eighteen inches apart, and about the same distance from each other in the rows. The ground has previously been thoroughly dug up and pulverized by a long-bladed mattock. The fertilizers used are ashes, fish, decomposed hay, straw, and sea-weed, or night soil. The plants are thoroughly hoed, billed, and irrigated. In October and November the leaves are stripped off and the stalks are then cut and the hard outer covering is removed, and the remaining portion is then ground between rollers of stone or hard wood. The cane juice is then boiled in iron kettles till granulation takes place, when it is placed in bags and pressed dry. The expressed sirup is used as molasses. Dry upland soils are required for the successful growth of the cane, and the expenditure of labor and fertilizers is as great, if not greater than for any other crop. Great exertions are being made to promote the increased production of sugar, and large orders for apparatus for sugar-making come from districts which heretofore have not grown sugar cane.

—Amid many discouragements I have made 1300 gallons of sirup this year, besides which there has been a large quantity made in this county and price

have been so far good. One fault we have to find is, the fact that we have to exchange it for goods in some instances. I have quit making so much on shares, and adopted the plan of charging 20 cents per gallon for making. G. W. S. Andrain Co., Mo.

—W. F. Mc., of Swanwick, Ill., suggests the propriety of cane in the purchase of cane seed, to be sure it has ripened well, is true to name, has been well cleaned, and to test it before planting. For some will have been gathered ere ripe, and other after frost.

The National Academy of Sciences, through its president, O. C. Marsh, on January 10th, made a report on glucose to the commissioner of internal revenue, Washington. After stating what starch sugar is, how manufactured and chiefly used, the report says: The starch sugar industry of the United States gives employment to twenty-nine factories, having an estimated capital of \$5,000,000, consuming forty thousand bushels of corn per day, and producing grain sugar and glucose to the annual value of nearly \$10,000,000. In Germany in 1881-2 there were thirty-nine factories of this sort, consuming seventy thousand tons of starch and producing forty thousand tons of starch sugar. Thorough investigation of the whole subject has been made by members of the academy, and as a result the following facts appear: That the manufacture of sugar from starch is a long-established industry, scientifically valuable and commercially important; that the process employed at the present time are unobjectionably in character and are uncontaminated; that starch sugar thus made and sent into commerce is of exceptional purity and uniformly in composition, and contains no injurious substances, and that, although having at best about only two-thirds the sweetening power of cane sugar, yet starch sugar is in no way inferior to cane sugar in healthfulness, there being no evidence before committee that maize-starch sugar, either in its normal condition or fermented, has any deleterious effect upon the system, even when taken in large quantities.

Barnes' Wire Check Rower.

In this issue we give an illustration of this implement, so well known to many of our readers, in use on a cane planter. We wish to remind those who are not familiar with check rowers that as a matter of economy their use is indispensable. Their use saves marking off the ground, saves delay in planting, dispenses with expense of a dropper on the cane planter and reduces cane planting to accurate measurement. With the use of a check rower the farmer can plant in wet weather, immediately after the plow, giving the cane an equal start with the weeds, an advantage in the maturing of one crop that will make many times the cost of a check rower. The Barnes' Wire Check Rower has now been before the public eleven years. Its popular success has been phenomenal. It works on all cane planters. It is popular because simple and easily operated. Its great feature is that the wire does not cross the machine, thus avoiding great wear and strain on the wire and friction on the pulleys. This gives the wire a great lasting quality that is appreciated by farmers, as it avoids the expense of frequently renewing the wire.

Its manufacturers, the Chambers, Bering, Quinlan Co., of Decatur, Ill., to meet the demand have, year by year, enlarged their facilities until their shops, warehouses, etc., now cover acres, and their factory is admirably complete.

The fair and generous dealing of the members of the firm have made them very popular with their trade and we are pleased to record their success.

The reason why so many die with consumption, is because they neglect to use the proper remedy in season. When the system is first attacked with a cough, oppression of the chest, or seated pains in the breast, Allen's Lung Balsam will cause the phlegm to raise, heal the irritated parts, and restore the system to health.

We call attention to the advertisement of "The Hillside Fruit Farm." This place is desirable in every respect and will be sold on the most favorable terms.

Agricultural.

Small Ice-Houses on Farms.

Sam Lawrence writes in the *Indiana Farmer*: "From my experience with small ice-houses, the best and cheapest way is to have the place for storing underground. It has been claimed and is still claimed by many persons that ice even in small quantities will keep better above ground than below. This is not the case. The keeping quality of ice depends, when a proper covering is given, upon its being kept dry. Dryness may be attained by securing a good natural or artificial drainage underneath, and by admitting plenty of air to absorb the damp vapors that will arise at the top of the building. In large houses an outlet must be constructed for the dripping water. Such a construction is hardly ever necessary in small buildings, since the water will soak into the ground. Quantities of ice may be more easily kept above the surface, because proper drainage can then be had, and besides it is less expensive to build above ground than to excavate. In the small ice house the principal care is to guard against the effects of solar heat. This can be done with less expense by using the ground as a part protector.

Since the contents of the ice-house should be convenient, there is but little choice of location. A northern slope is coolest, and hence the best. Trees should be planted so that they will shade the building at all times of the day. Ten or twelve tons of ice will give the required supply during the summer for the ordinary uses on the farm. Each cubic foot of ice weighs about sixty pounds. At that weight twelve tons would occupy a space of four hundred feet. To contain this much ice the excavation in the ground may be made ten by twelve, and from the top of the wall the depth should be seven feet. I have found that a wall one foot in thickness, when the rock is properly laid in the mortar, is sufficiently strong. The ice should be cut to fit the remaining space, after leaving six or eight inches around the walls for sawdust. Before filling with ice rails should be laid in the bottom. The rails are then covered with straw to give a level surface upon which to lay the ice. In wet localities rails may not give sufficient space for water, but in most cases they will give plenty of room. The roof needs to be double. Both coverings can be of boards or the outer one may be shingled. Shingles are more lasting. Boards may then be nailed to the under side of the rafters and the intervening space filled with sawdust. A ventilator may be put in the roof, but the same effect may be had by leaving one of the doors in the gable partly open.

Many farms have streams flowing through, or close by them, from which ice can be cut on the deeper parts. If there are no suitable natural ponds, an artificial one can be constructed at small expense. By having the place for cutting close by, the ice can be put up much more rapidly. Rapidity is worth money in the ice harvest, since in this latitude there are often only a few days on which the ice is fit for cutting.

A. S. Yarbrough, of Mississippi in *Home and Farm*, says: I must beg to differ from the opinion of S. J. Andrews as to the merits of Japan clover. My experience with it has been such as to convince me that it is the greatest boon to stock that we have in the South, and that it will yet be regarded by the many as a special gift on the part of Providence to meet the necessities of our neglected animals, while their owners were blindly following the fallacious plan of making cotton to buy nearly everything else.

In many sections of the South there is nothing else but the leaves of bushes and trees on which stock can graze for several months of the year. Even though roads and gullies that are too poor to grow anything else are, in many places, covered with a flourishing carpet of green by this clover. The "cattle of a thousand hills" live and grow fat as witnesses of its worth.

To W. M. Sears (who asks for information as to a winter grazing grass), I would say that Terrell grass or *Elymus Virginicus* is a native perennial grass that springs up and grows with vigor in the fall and winter and dies down in summer. It can be cut for hay in the spring about the time rye ripens, if preferred, but its chief excellence is, that it is green when nearly all other of our native grasses are dead, and all farm animals are fond of it. I think, however, that hogs are more fond of the roots than the blades; at least, they are fond of rooting it up. If any one will sow the seed on the surface of well prepared land in the fall or early winter and keep all stock off until the succeeding winter, they have a pasture proportioned to the quality of the land and quantity of seed sown.

—The Illinois State Board of Agriculture has fixed the date of the next State Fair to be given at Chicago Sept. 4, and the next Fat Stock Show to begin Nov. 11, also at Chicago. It was decided to invite the American Clydesdale Association to hold its next exhibition in connection with the State Fair. The Treasurer's report was presented at the evening session and shows a handsome balance. While the board suffered a loss by the last Fat-Stock Show, the profit for the year is still over \$10,000.

The Shepherd.

State Wool Growers' Association.

As mentioned in these columns from time to time, the annual meeting of the Missouri State Wool Growers' Association is attracting attention, particularly as the place of meeting is undetermined, and the Secretaryship vacant.

We consider this latter fact a great misfortune, because, if he be the right man, the Secretary is not only the brains of the management, but the executive officer who runs the machine; hence, no time should be lost in making the appointment.

We have already given evidence of the fact that many wool growers would like to see H. V. Pugsley take the office, and we hope to see him appointed, and get to work very soon. The following item from the *Democrat* of Plattsburg, will bear thinking about:

"As we mentioned last week, the State Wool Growers' Association is looking for a place for the holding of their next annual convention, which is to be held in April. Several places have been mentioned, Plattsburg among the number. If our citizens want the meeting held here, we believe they can secure it. The executive committee ask that the town shall try to get special rates on the railroads for the transportation of the members and their sheep, provide a place for the meeting of the association and a place for the keeping of the sheep and for the public shearing. The court house would answer for the holding of the meetings, and either of the livery stables for keeping the sheep. Of course the owners would pay for the feed. H. V. Pugsley, of this place, is a member of the executive committee, and is anxious to have the meeting held here. It will bring together leading and representative men from all parts of the State, which could not fail to be of benefit to our town and county. We trust our citizens will make an effort to have the meeting set for Plattsburg."

If Plattsburg were more easily accessible by railroad, and had the hotel accommodation for from 100 to 150 extra guests, we would be in favor of holding the meeting there, for it is the centre of one of the very finest stock counties to be found in the land, and numbers more fine flocks, fine herds, and first rate farmers, than can be found in ninety-nine out of a hundred. But it is not as accessible as Mexico, Moberly or Sedalia. Nor has it the hotel accommodation possessed by either of these.

But perhaps our good brother of the *Democrat* can tell a different story, and show us how we can get there, (better than we have yet learned,) and tell that the farmers and fine stock breeders of all the country round, would care for the guests when the hotels are full.

On the Road to Vermont.

We have two letters from well known merino sheep breeders, on their way to Vermont to replenish their depleted flocks.

R. T. McCulley, of Lee's Summit, Mo., writes from Schenectady, New York, under date of January 12th. "While on my way to Vermont, I made a stop over in this State, and had an offer of \$1,000 for five of our choice ewes, an average of \$200 each, thus exhibiting the high esteem in which our fine flock of registered merino sheep is held in this great breeding State. Will be in Vermont next week, and expect to buy and bring home with me, two car loads of the best sheep to be had."

Two days later, H. V. Pugsley, of Plattsburg, Mo., wrote from the same State, "Last Thursday I started with R. T. McCulley for Vermont, for one or two car loads of the best sheep to be had. We stopped over two days in the State of New York, and were royally entertained by the breeders of Merinos there. One man offered me \$200 a head for six of my best ewes, and McCulley was offered the same for five of his. Just before I left home I sold twenty registered ewes to J. S. Turner, of Plattsburg, for \$600, and one ram to Nebraska for \$150. We will reach Vermont to-day. Lots of snow and cold."

Thus does the business prosper with our Missouri Merino sheep breeders. And right glad are we to chronicle the fact.

Selling Wool.

Mr. G. B. Bothwell writes the *RURAL WORLD*, "In the matter of selling wool I have lost money enough in the last twenty years by not selling my wool at the right time and in the right place to purchase a fine farm and stock it, and my best luck has been in selling at my barns."

For the 2500 sheep of my home flock we have had an abundance of blue grass and clover pasturage up to this date (Dec. 7th). They eat but little hay but we have been feeding a little corn for thirty days past to all the flocks. This is essentially necessary to insure no loss of flesh and, to insure, a fine growth and an extra quality of wool.

My flock has the finest length of staple that I ever saw at this season of the year. An abundance of grass all the season and but little excessive hot weather accounts not for this only, but their general good health.

Scab on the Neck.

EDITOR *RURAL WORLD*:—We have a merino buck, that for the last three years has broken out in scabby spots on the neck, side and flanks. It always comes on him just after the rutting season has commenced, and he runs down rapidly. It is not scab we think. It is not contagious, and two applications of dip seemed to cure up the spots, but they break out in other places. We think it may be "pelt rot." He is inclined to scratch some, but not as much as scabby sheep do. No one here seems to know what it is, so we thought would write to you. This has been a pretty good winter for sheep in Montana, or at least in this section. Hoping to get an answer to this in your columns, we are

N. E. M.

Respectfully,
Stanford, Montana.
We have a very large number of sheep breeders on our list of subscribers, the majority of them breeders of thoroughbred stock. They will do us a favor if they will kindly tell N. E. M., what he wants to know, through our columns."

EDITOR *RURAL WORLD*: For the encouragement of those who think the bottom has dropped out of the sheep business I will give you the experience of my neighbor, Mr. Reed, with a lot of scrub ewes or low grades. In the summer of 1881 he bought something near

200 coarse wool ewes, bred them to a Merino ram, and in '82 raised 130 per cent. of lambs. In the spring of '83 he raised 100 per cent. of lambs, fattened 90 of the old ewes and sold them a few weeks since, so as to net him \$4.00 per head. He also sold 150 yearling lambs, that sheared 7 lbs. of medium wool last spring, for \$3 per head.

This demonstrates that, even with scrub and grade sheep, money may be made if they are properly handled. The day is forever past, when sheep will be slaughtered for their pelts and tallow. We have seen, these ewes and yearling lambs and their fleeces brought about \$10 per head.
G. B. B.
Breckenridge, Mo.

The Pig Pen.

The card of Holt Bro's, of Arlington, Kentucky, breeders of thoroughbred White and Berkshire pigs, appears in this issue in our breeders' directory. In Kentucky the Chester White has always found much favor and been bred to perfection. Some of our readers might like to try the Holt Bro's stock.

EDITOR *RURAL WORLD*: You perhaps will not recognize me by my address, as one of your old subscribers; but such is the fact. I moved from Chappell Hill, Washington Co., and had my subscription paid for one year in advance when I left there. I want information about Berkshire hogs. If you cannot give me the information, hand this to some breeder, if you please. Send me a copy of the *RURAL*, I want to see its familiar face, once more. I may get you up a club. I want to know the price per pair of Berkshire and Poland Chinas. By answering at once you will very much oblige an old reader.
J. E.
Abilene, Tex.

Glad, very glad, to hear from you, old friend. We have mailed you a paper in which you will find plenty of breeders, advertising pigs. Let us hear from you again.

Convincing Evidence.

It is hardly necessary to add to the list of convincing evidences of the value of the *RURAL WORLD* as an advertising medium; but the following from J. Baker Sapp, proprietor of the World, and owner of Stock Farm, Columbia, Mo., is so much to the point that we cannot refuse it space for publication. After giving a detailed list of sales of Berkshire pigs made during the year 1883, he closes a very interesting letter thus: "This shows a total of \$930, and an average of \$20.20, and all made from my card in the grand old *RURAL WORLD*. My hogs are in fine condition and my new catalogue ready and may be had by addressing me at Columbia." But the fact is, Mr. Sapp breeds only first-class pigs.

A Short Article on Pigs.

The editor of the *Rural New-Yorker* asks me to write a short article on pigs, and he does not care how short.

How is it possible for a man who has a large herd of pigs this year, to be anything but short? And, unfortunately, my wheat is short, and corn is short, and wool is low.

If, like the editor of the *Rural New-Yorker*, we could raise 1,000 bushels of potatoes per acre, we could smile at Bismarck and the low price of pork.

As it is, this is no laughing matter. Corn is high and pork low. This is simply what the books call "careful selection." If preferred, it may be called "judicious slaughtering." The first aim of the pig breeder should be to get healthy, vigorous pigs. I keep nothing but pure-bred pigs on my own farm, and have never had any disease among them. But one of my neighbors has a common part Chester White sow that he brought this Spring to one of my boys, and he has now a litter of pigs heavier, stronger, and more vigorous and more profitable for pork-making than any litter on my farm, and so far as my observation goes, this is the general result of crossing common, vigorous and healthy sows with fine-boned, pure-bred boars.

I will not insert it as a fact, but I am inclined to think that good common—what we may call "native"—animals are healthier than pure-bred animals.

We want the good qualities of both, combined in one animal. We want the health, vigor, hardiness and powerful digestion of the native united with the quietness of disposition, fine bones, small offal, early maturity and fattening qualities of the pure-bred.

I feel confident that to a large degree this can be accomplished by selecting the best native or grade sows and breeding them to the finest and best pure-bred boars.
JOSEPH HARRIS.
Moreton Farm, N. Y.

The Poultry Yard.

EDITOR *RURAL WORLD*: Please take the turkeys out of our Breeders' Card. We have sold all we had for sale and are overwhelmed with orders for stock we haven't got. We again take pleasure in commending the *RURAL* as an advertising paper. It has been the means of selling a great number of sheep and quantities of poultry for us.
R. T. McCulley & Bro.

Chicken Cholera.

EDITOR *RURAL WORLD*: Enclosed find one dollar to pay for the *RURAL WORLD* one year. It is pre-eminently the people's paper—valuable, and comes at a very reasonable price.

In this connection I would like to give you, and through you the world at large, my preventive against chicken cholera and also my reasons therefor. In the first place if the fowl are only fed corn, crack it for them. Then amongst the cracked corn throw some broken limestone—broken to about the size of peas. 100 chickens will thus eat one quart of pounded limestone in two days. Give them plenty of water.

Chicken cholera prevails on the prairies of the West on account of the common habit of feeding nothing but whole corn—which is very hard to digest—and the almost total absence of rough gravel for chickens to pick up. All the gravel to be found has the edges worn off and consequently is of no use to assist a chicken in grinding whole corn. I am sick of seeing so much written and advertising done about cures for chicken cholera. A good, reliable preventive is much better than a cure.
Very truly yours,
J. H.
Buckley, Ills.

January brings along many expectations that often are not realized by the confiding poultry breeder. Visions of eggs in every nest, followed by a desire on the part of a few broody hens to rear a couple of clutches in early spring, seem pleasing anticipations in this month.

We seldom think when we feel too sanguine about such things, to ask ourselves if our hens have winter-laying properties; have our pullets reached the proper age for laying? Have we fed, housed and properly cared for them to induce them to lay in January? But this January may be an exception to the general rule, for the weather all along the past few months was favorable for egg production and early setting.

There are many advantages to be gained by having your breeding towels mated this month and the hens started in the egg business. An early brood or two is a decided advantage. They are generally the first layers the following winter, and, if of the Asiatic class, have time to mature before cold weather.

Brahma and Cochon breeders are always anxious to secure a few early broods. Some attempt to get them out in February, to have a few points fully developed before the winter exhibitions begin. These make large and heavy birds if they can be kept comfortable and the warm sunny days of spring infuse new life in them.

Do not neglect your breeding fowls this month, but take good care of them and supply their necessary wants. It is poor policy, however, to feed them too much or too often. They should be in good condition, without being too fat, for remember a "fatty state" is antagonistic to productiveness.—*Poultry Monthly*.

Sundries.

Sergeant Mason, who shot at Guiteau, will settle in Washington as a shoemaker.

A watch factory, to employ 150 hands, is to be started at New Haven, Ct.

My wife had fits.—"For 35 years," says our correspondent Henry Clark, of Fairfield, Lenawee Co., Mich., "my wife had fits. They would last about an hour, and sometimes longer. Samaritan Nerve has permanently cured her."

A tramp who was killed by the cars while stealing a ride near Eugene City, Cal., a short time ago, had \$300 on his person.

The arrival of immigrants at New York the past year have fallen off over 60,000 as compared with the previous year.

Well dressed people do not wear dingy or faded things when the 10c. and guaranteed Diamond Dye will make them good as new. They are perfect. Get at druggist and be economical. Wells, Richardson & Co., Burlington, Vt.

A marriage recently took place in Houston, Texas, at which the bride was too ill to stand, and was obliged to sit through the ceremony.

Miss Nora Wood, near Kearney Station, Neb., who was thrown from a horse five years ago, producing complete paralysis of the lower extremities, is now under treatment at Drs. Dickinson and Stark's Surgical Institute at Kansas City, with a fair prospect of recovery, and which her many friends will be glad to learn.

Villages along the Ohio are languishing because the river is no longer the great avenue of trade, and the steamboat has disappeared before the railroad.

"ROUGH ON TOOTHACHE," instant relief. 15c.

DR. JOHN BULL'S
Smith's Tonic Syrup
FOR THE CURE OF
FEVER AND AGUE
Or CHILLS and FEVER,
AND ALL MALARIAL DISEASES.

The proprietor of this celebrated medicine justly claims for it a superiority over all remedies ever offered to the public for the SAFE, CERTAIN, SPEEDY AND PERMANENT cure of Ague and Fever, or Chills and Fever, whether of short or long standing. He refers to the entire Western and Southern country to bear him testimony to the truth of the assertion that in no case whatever will it fail to cure if the directions are strictly followed and carried out. In a great many cases a single dose has been sufficient for a cure, and while families have been cured by a single bottle, with a perfect restoration of the general health. It is, however, prudent, and in every case more certain to cure, if its use is continued in smaller doses for a week or two after the disease has been checked, more especially in difficult and long-standing cases. Usually this medicine will not require any aid to keep the bowels in good order. Should the patient, however, require a cathartic medicine, after having taken three or four doses of the Tonic, a single dose of BULL'S VEGETABLE FAMILY PILLS will be sufficient.

BULL'S SARSAPARILLA is the old and reliable remedy for impurities of the blood and Scrofulous affections—the King of Blood Purifiers.

DR. JOHN BULL'S VEGETABLE WORM DESTROYER is prepared in the form of candy drops, attractive to the sight and pleasant to the taste.

DR. JOHN BULL'S
SMITH'S TONIC SYRUP,
BULL'S SARSAPARILLA,
BULL'S WORM DESTROYER,
The Popular Remedies of the Day.
Principal Office, 331 Main St., LOUISVILLE, KY.

TICKNOR & CO.,
The well-known Merchant Tailors of St. Louis is (established in 1837), will upon request send free by mail a full line of samples of piece goods, their rules for self-measurement, prices, etc., thus enabling you to order from them clothing of late styles and perfect fit.

THE BEST

Hair restorative in the world is HALL'S HAIR RENEVER. It cures all diseases of the scalp, and stimulates the hair glands to healthful action. It stops the falling of the hair; prevents its turning gray; cures baldness, and restores youthful color and freshness of appearance to heads already white with age. The following are a few illustrations of what is done by

HALL'S
Vegetable Sicilian
HAIR RENEVER:

Mrs. HUNTER, 344 Franklin Ave., Brooklyn, N. Y., after a severe attack of Erysipelas broke her head, her hair turned gray—falling off so rapidly that she soon became quite bald. One bottle of HALL'S HAIR RENEVER brought it back as soft, brown and thick as when she was a girl.

Mr. KEELING, an old farmer, near Warsaw, Ind., had scarcely any hair left, and what little there was of it had become nearly white. One bottle of HALL'S HAIR RENEVER stopped its falling out, and gave him a thick, luxuriant head of hair, as brown and fresh as he ever had.

Mrs. A. T. WALL, Greenfield, Cheshire, Eng., writes: "I have found the greatest benefit from the use of HALL'S HAIR RENEVER, it having restored my hair, which was rapidly falling out, and returned its original color."

Dr. EMIL SEIP, Detroit, Mich., certifies that "HALL'S HAIR RENEVER is excellent for hair growing, and gives back the natural color to faded and gray hair."

Mrs. S. E. ELLIOTT, Greenville, V. Va., says: "One bottle of HALL'S HAIR RENEVER restored my hair to its natural, youthful color." No injurious substance enters into the composition of HALL'S HAIR RENEVER, and it is not a dye. Its vegetable ingredients render it in the highest degree beneficial to the scalp as a preventive of dandruff. Its effects are natural and lasting, and it does not make the hair dry and brassy, like the so-called restoratives compounded with alcohol.

Buckingham's Dye
FOR THE
WHISKERS

Is, in four respects, superior to all others. 1st—It will produce a rich, natural color, brown or black, as desired.

2d—The color so produced is permanent, cannot be washed off, and will not soil anything with which it comes in contact.

3d—It is a single preparation, and more convenient of application than any other hair or whisker dye.

4th—It contains no deleterious ingredients, as do many preparations offered for like use.

PREPARED BY
R. P. HALL & CO., Nashua, N. H.
Sold by all dealers in medicines.

A-GREAT-PROBLEM
TAKE ALL THE

Kidney and Liver
Medicines

BLOOD
PURIFIERS

RHEUMATIC
REMEDIES.

Dyspepsia
And Indigestion Cures.

Ague, Fever,
And Bilious Specifics,

Brain and Nerve
Force Revivers.

Great Health
RESTORES.

IN SHORT, TAKE ALL THE BEST qualities of medicine, and the best qualities of all the best medicines of the World, and you will find that **HOP BITTERS** have the best curative qualities and powers of all concentrated in them, and that they will cure when any or all of these, singly or combined, fail. A thorough trial will give positive proof of this.

The Laclede Hotel,
St. Louis, Mo.

Is now in complete order, refurnished, redecorated and re-appointed. New sewerage & plumbing, with every sanitary improvement. 300 rooms for guests, single and en-suite, with or without bath. First-class in every respect. Popular prices.

GRISWOLD & SPERRY,
Owners and Proprietors.

WE WILL REPAIR YOUR WATCHES, by MAIL OR EXPRESS, O. D., to be examined before paying any money and if not satisfactory, returned at our expense. We manufacture all our watches and save you 30 per cent. Catalogue of 250 styles free. Every Watch Warranted. Address: STANDARD AMERICAN WATCH CO., PITTSBURGH, PA.

Don't be Humbugged
With Poor, Cheap Cutters.
All farmers have had trouble with their Cutters. In a few days they get to wabbling, are condemned and thrown aside. In our "BOSS" Cutter we furnish a tool which can scarcely be worn out; and when worn, the wearable parts, a prepared wood journal, and movable thimble in the hub (held in place by a key) can be easily and cheaply renewed. We guarantee our "BOSS" to plow more acres than any other three Cutters now used.
OUR "O. K." CLAMP
Attaches the Cutter to any size or kind of beam, either right or left hand. Works just after using it you will say it is the **Best Tool on the Market**. Ask your dealer for it. Manufactured by the **BOSS CUTLER CO.**, Bunker Hill, Ills.

HAY PRESSES

DEREDICK'S HAY PRESSES.
The customer keeping the one that suits best.

Order on trial, address for circular and location of Western and Southern Branches and Agents.

TAKE NOTICE.—As parties infringing on patents falsely claim premiums and superiority over Dederick's Reversible Perpetual Press.

Now, therefore, I offer and guarantee as follows: First, That having Hay with One Horse, Dederick's Press will beat the solidity required to load a grain car, twice as fast as the presses in question, and with greater ease to both horse and man at that.

Second, That Dederick's Press operated by One Horse will bale faster and more compact than the presses in question, operated by Two Horses, and with greater ease to both man and beast.

Third, That there is not a single point or feature of the two presses wherein Dederick's is not the superior and most desirable.

Dederick Press will be sent any where on this guarantee, on trial at Dederick's risk and cost.

P. K. DEDERICK & CO., Albany, N. Y.
JOHN R. CALHOUN & CO., St. Louis, Agts.

WHITMAN'S IMPROVED
SEELEY PATENT

PERPETUAL HAY AND STRAW PRESS.
Patented Feb. 19, 1883, and Feb. 19, 1884, and others, 1882, and Grand Gold Medal in 1883, over Dederick and others. The only perfect Hay Press made. Plus 10 tons in 10 minutes. A bale every 10 minutes. Satisfaction guaranteed. Three bales to any other Press! Two. Send for Circular. Also Horse-Power, Load Capacity, Cider Mills, Corn Shellers, Feed Cutters, etc. Manufactured by "THE GREAT AGRICULTURAL CO., St. Louis, Mo."

CHEAP HOMES
IN
Arkansas & Texas.

Along the line of the St. Louis, Iron Mountain & Southern Railway, Texas & Pacific Railway and International & Great Northern Railroad, are thousands of acres of the choicest farming and grazing lands in the world, ranging in price from \$2.00 to \$3.00 and \$4.00 per acre, in a healthy country, with climate unsurpassed for salubrity and comfort. Send your address to the undersigned for a copy of statistics of crops raised in Arkansas and Texas, in 1882, and make up your mind to go and see for yourself when you learn that the crop for 1883 is 50 per cent. larger than that of 1882.

To those purchasing land owned by the Company, and paying one-fourth, one-half, or all cash, a proportionate rebate is allowed for money paid for tickets or freight over the Company's lines.

H. C. TOWNSEND,
Gen'l Pass. Agent,
ST. LOUIS, MO.

HOME
And Indigestion Cures.
Ague, Fever,
And Bilious Specifics,
Brain and Nerve
Force Revivers.
Great Health
RESTORES.

SANATIVE
CORDIAL
PURIFIES THE BLOOD,
ERADICATES MALARIAL POISON,
Re-invigorates the System, PREVENTS AND CURES Chills, Fevers, Dyspepsia, Summer, Fever, and Liver Disorders. Recommended by best physicians.

Pronounced a Medicine by United States Revenue Department.
For sale by all Druggists and Dealers generally.

Principal Office and Laboratory
24 & 26 North Main St., ST. LOUIS.

360 ACRE FARM FOR SALE!
All in cultivation and grass except thirty acres of timber. Good house and barn and other buildings; abundance of water, hedge fences, orchard and five pastures, situated five miles west of Sedalia. In one of the finest stock farms in Missouri. For further particulars address M. M. Pemberton, Lamotte, Pettis county, Mo.

\$25 a month to one general agent in each county; something new & rare chance; outfit free. E. I. C. Co., 331 Canal Street N. Y.

DRAIN YOUR FARM!
The Cheapest Way to Produce good crop

FARM DRAIN TILE.
Send for Illustrated circular to S. MITCHELL & SONS, 20 S. 11th St., St. Louis, Mo.

Don't be Humbugged
With Poor, Cheap Cutters.
All farmers have had trouble with their Cutters. In a few days they get to wabbling, are condemned and thrown aside. In our "BOSS" Cutter we furnish a tool which can scarcely be worn out; and when worn, the wearable parts, a prepared wood journal, and movable thimble in the hub (held in place by a key) can be easily and cheaply renewed. We guarantee our "BOSS" to plow more acres than any other three Cutters now used.
OUR "O. K." CLAMP
Attaches the Cutter to any size or kind of beam, either right or left hand. Works just after using it you will say it is the **Best Tool on the Market**. Ask your dealer for it. Manufactured by the **BOSS CUTLER CO.**, Bunker Hill, Ills.

DR. G. W. HOFFMAN'S
Don't Neglect
HOOGS
POULTRY

Agents Wanted in Every Sheep District in the U. S. Seymour's Family Sheep Shears are the most durable, if not the best, and are the most durable. Henry Seymour Cutlery Co., HOLYOKE, MASS.

SEYMOUR'S DIAMOND-EDGE
SHEEP SHEARS
Write for Agents' Terms.

ESTABLISHED 1833.
WM. N. TIVY,
Butter, Cheese, Eggs, Honey, Wool and General Commission Merchant,
424 NORTH SECOND STREET, ST. LOUIS, MO.

Dr. G. W. Hoffman's
Don't Neglect
HOOGS
POULTRY

Agents Wanted in Every Sheep District in the U. S. Seymour's Family Sheep Shears are the most durable, if not the best, and are the most durable. Henry Seymour Cutlery Co., HOLYOKE, MASS.

266th EDITION, PRICE ONLY \$1 BY MAIL POST-PAID.

THE SCIENCE
OF LIFE

KNOW THYSELF.
A Great Medical Work on Manhood.

Exhausted Vitality, Nervousness and Physical Debility, Premature Decay, and all the ills of Youth, and the untold miseries resulting from indiscretions or excesses. A book for every man, young or old, that contains 125 prescriptions for all acute and chronic diseases, each one of which is invaluable. So found by the author, whose experience for 25 years has been in the treatment of these diseases, each one of which is invaluable. Before he fell to the lot of any physician, 3000 cases, bound in beautiful French muslin, embossed covers, full gilt guaranteed to be a finer work in every sense—mechanical, literary and professional—than any other work sold in this country for \$2.00. The money will be refunded in every instance. Price only \$1.00 by mail, postpaid. Illustrative sample 6 cents. Send no money. The author by the National Medical Association, to the officers of which he refers. This book should be read by the young for instruction, and by the afflicted for relief. London Lancet.

There is no member of society to whom this book will not be useful, whether youth, parent, guardian, instructor or clergyman. Address the Peabody Medical Institute, or Dr. W. H. Parker, No. 4, Bulfinch St., Boston, Mass., who may be consulted on all diseases requiring skill and scientific knowledge. Such treated successfully with this book. Address DR. WARD & CO., Louisiana, Mo.

FREE!
RELIABLE SELF-CURE.

A favorite prescription of one of the most noted and successful specialists in the U. S. (now retired) for the cure of Nervous Debility, Loss of Memory, and all the ills of the system. Address DR. WARD & CO., Louisiana, Mo.

FREE FOR TRIAL
An unfailing and speedy cure for Nervous Debility and Weakness, Loss of Memory, and all the ills of the system. Address DR. WARD & CO., Louisiana, Mo.

MANHOOD RESTORED.
A victim of early imprudence, causing nervous debility, premature decay, etc., having tried in vain every remedy, has discovered a simple means of self-cure, which will send him FREE to follow his own path. Address J. H.

Horticultural.

[Judge Samuel Miller, Bluffton, Mo., will assist in conducting the Horticultural Department in this journal. Any inquiries addressed to him will be promptly answered through the RURAL WORLD.]

Inquiries Answered.

JUDGE MILLER: Please inform me through the RURAL WORLD, if the "Triumph" will endure our winters without protection? how it compares with "Martha" in quality and productiveness, and is it equal or superior to the "Pockington"? Also, is the "Herbert" desirable for this latitude, if slightly protected? How does the "Telegraph" compare with the Concord for a common "every-day" grape? I will be greatly obliged if you will reply as soon as convenient.

MRS. H. I. Triumph will stand ordinary winters, but I fear the present one is too much for it and any others except the very hardiest. It is far superior to either the Martha or Pockington in quality, as well as larger in bulk than even the Pockington.

Herbert is a complete failure with me for years past, but in a city if trained on a wall facing the south, might do well. But even then it should be laid down and covered over winter.

Telegraph is a week earlier than Concord, a little sweeter, but harder pulp. Roots so bad with me that only two vines are left for old acquaintance sake.

S. M.

R. G. WRIGHT: If your apples are frozen in the pit don't touch them, and pack the opening made to take some out, as tight shut as possible, to exclude the light and air as much as possible; and when the frost is all out of the ground, your apples will come out all right.

But your potatoes are done for, as far as the frost has penetrated. Saltpetre won't save them.

There is nothing more easily damaged by frost than a potato.

S. M.

R. G. E.—That Mexican tree bean is not a tree at all. The full season of the term, for instance, sent out runners in several instances. It is, however, a very productive, handsome little bean, of excellent quality. With me it will take the place of the old Navy bean.

But don't put 25 cents for a small packet of 100 seeds, 5 cents should secure you that many. For 25 cents I will send you a half pint.

S. M.

The weather is beautiful, but most too cold. The cold of the 4th inst. has killed all the peaches, most of the raspberries and blackberries, and I fear has greatly injured pears and cherries. Most wood of last year's growth is much hurt, so we may look for a great harm to pear trees from blight next summer. The thermometer at my place was 32° below zero the morning of the 4th.

J. H.

COL. COLMAN: In last week's paper, J. S. N. asked for a wash for fruit-trees, to keep off rabbits. I have used, with success, a paint made of tar, sulphur and soft soap. Keep hogs from trees while painted.

Respectfully,

Huntsville, Mo.

J. D. H.

EDITOR RURAL WORLD: I see in your last issue from friend Samuel Miller, of Bluffton, Missouri, he predicts that the peach buds through Missouri and Illinois are killed; in my mind it is so, for they are dead here, and not them alone, but the apple buds are pretty seriously hurt. In looking through my orchard the Janitor seem to all be dead. Winter Romanie I think 10 to 15 per cent; Sharon Pippin, Ben Davis and some other seem to be lightly damaged. I cannot see that the trees are damaged, but a majority of the terminal buds of all apple trees I examined seem dead. Cherries partially killed, Wildgoose plum all right. My raspberries consist of Native, Gregg's, Brandywine and a yellow—do not know name—seem to be all right. Think strawberries all right as they were protected by snow.

The thermometer stood for several hours on the morning of the 5th, at 22° below zero, against north wind, building now, Mr. Editor, if you think worth a place in your valuable paper all right, if not I would be glad to hear reports from fruit growers through the RURAL from all parts of our country, as my special interest is in horticulture. From one, to whom the RURAL is a special treat every time it makes its weekly visit.

G. F. KENNAN.

Bridgewater, Benton Co., Ark.

Illinois Horticultural Society.

Prof. J. L. Budd, of Iowa, reports to the Register the cream of the proceedings of the late meeting of the Illinois State Horticultural Society. He says that, having just returned from the annual meeting of the State Horticultural Society at Bloomington, it may be best to give some hasty notes of opinions expressed by the old members, some of them, indeed, like the writer, members of the old "Northwestern Fruit Growers' Association."

The Test Winter.—From all parts of the State, from the beginning to the close of the session, the Directors and members told the sad story of the havoc to orchards, old and young, wrought by the winter of 1883-4. This was quite unexpected, as the papers last spring said less of orchard injury in Illinois than with us. Even so far south as Hancock and Mercer county the reports represented the orchard trees of the grade of hardiness of Ben Davis, Jonathan, Dominie, etc., either dead or man, maintaining a feeble show of life under the bark. The Willow, Roman Stem and Grimes Golden, were generally reported in fair condition, but as with us the Duchess, Fameuse and the summer sorts, as hardy as Red Astrachan, were the only ones coming out bright and sound.

High and Low Ground.—Through the meeting we had an unusual amount of talk relative to the productiveness and longevity of orchards on high and low land. The mass of evidence was in favor of the level prairies, where the sub-soil permitted perfect drainage or where the soil was made dry by tile draining. The orchards on thin upland, with rather tenacious clay sub-soils, had, as a rule, proven neither productive or as long lived as those on the richer bottom lands. Yet some of the older members

urged that on account of damage to the blossoms often by spring frosts, the high land was always the best when the sub-soil was such as to permit thorough drainage in a wet season, and the ascent of moisture from below in a dry season. As a rule only portions of the bluffs near the large streams have this favorable upland orchard soil. In Iowa a part of the ridges of the Western Slope have the natural conditions for tree growing.

High and Low Tops.—While all admitted that low tops, and leaning the trees when planted toward the 1 o'clock sun, was an advantage in preventing sun scald of the trunks, no one could say that the low topped trees of a given variety had stood the last test winter any better than the high topped ones.

Clogging Tile Drains.—The possibility of drain tile in orchards becoming clogged by the roots was discussed. The experience of twelve years as given by members was conclusive that apple roots would not live in the tile, and that clogging always came from willow, poplar, elm or other forest tree roots.

Orchard Protection.—The experience of the oldest members favored planting of shelter belts on the south and east but not on the north or west. Considerable evidence was given favoring the idea that orchards with shelter on the north and west were more liable to loss of fruit from late spring frosts. Orchards, too, under the shelter of natural timber, or planted groves at the north, had been most injured by sun scald in the winter, and the past winter had suffered most by the low temperature.

Replanting Trees in Orchard.—The idea was presented and endorsed that the holes for planting vacant places in the orchard should be dug in the fall so as to have the benefit of the winter freezing and thawing, and before putting in the tree in the spring straw should be burnt in each hole. The idea is worthy of careful consideration and trial.

Ringing Orchard Trees.—The experience of Mr. Spaulding in ringing orchard trees proving refractory in bearing was discussed. Experienced members denounced the plan, except in thickly planted orchards, where the final intention was to take out alternate trees. In this case the trees to come out may be profitably forced into early bearing.

Manure in Orchards.—Much evidence was given in favor of judicious manuring on bearing orchards. After an orchard of dry ground has borne a full, or even fair crop of fruit on rather thin soil the manuring had aided the trees in recuperating. Examples were given of yellow Bellflower bearing full crops year after year when standing where they received the wash of a barnyard, while on dry and thin soil fruit specimens were few and far between. Mr. Minkler, Tyler McWhorter, Mr. Hammond, and others emphatically expressed the opinion that the prejudice against the manuring of bearing orchards was not well founded.

Hogs and Sheep in the Orchard.—The hog in the orchard was discussed, pro and con. Quite a majority concluded that the orchard was good for the hog, but that the hog was not good for the orchard; yet Hon. John M. Pierson urged that two or three hogs to the acre, with feed lot outside the orchard, worked well for him, and if at all damaging to the orchard it was far more than compensated by the increased profits of the hog crop.

As to sheep in the orchard, about all agreed that it was all right with good management. The orchard should be used only as a pasture. When feed gets short take out the sheep at once. It is also requisite to take them out for good in early autumn and keep them out until feed is good in the spring. The evidence was strongly in favor of the pasturing and tramping of sheep in the way of lessening damage of insects of all kinds, thus giving larger crops of better fruits than were obtained in nearly adjoining orchards grown up to grass and weeds.

Hardier Cherries and Pears.—The general sentiment expressed was that the Early and Late Richmond and English Morello cherry trees were too short-lived and irregular in bearing to give satisfactory profits to the commercial orchardists. Much interest was taken in the expressed opinion of the writer that many varieties of hardier and better cherries might be imported from Europe than those we now have. With the pear statements were still less favorable. Dr. Shroeder, of Bloomington, reported fine crops of excellent fruit from the Jungfernbirn of his native country imported a number of years ago. This experience favors the idea that the pears of the East plain will yet do well with us.

Grapes.—A very unsatisfactory crop of grapes was generally reported, and much loss to the vines by the test winter. The grape mildew was also reported on the increase to an extent quite equal to its ravages farther east. Vineyards on sandy soils had borne the best crops of the healthiest fruit, where the circulation of air from the west and north was permitted. With shelter on the north the crop had been cut off by the spring frosts. The plan of training laterally on a high wire, so the fruit could hang down under the protection of the leaves was warmly recommended by those who had tried it. Parker Earle reported perfect success in protecting from the rot by covering the bunches with paper and paper bags. By actual test he had found that the crop could be protected for half a cent per pound. The Worden was warmly endorsed as a promising addition to the list wherever tried.

The Risling was very favorably reported. Mr. Riehl, of Alton, said it had come to stay. In Missouri it was also reported perfect in leaf and desirable in fruit. Cottage also had many good words in its favor as it has with us. Lady Washington and other Newburg seedlings were reported poor in leaf and decidedly tender.

The Strawberry.—The Crescent Seedling was generally reported King the past season, mainly though because less troubled with the Tarnished Plant Bug. Mr. Earle, the king grower of the West, gave in detail his mode of culture, management, varieties, etc.

The question of possible change of pistillate varieties like Green Prolific by the variety used in fertilizing was discussed. Opinions seemed divided, but a number believed, as does the writer, that a detached row of Green Prolific fertilized by Downer's Prolific will give fruit of better quality than such a row fertilized by the sour red jacket. Mr. Earle had derived great benefit from the use of wood ashes in his strawberry patches.

Experimental Horticulture.—Arrange-

ments were made to solicit the coming Legislature for an appropriation for much-needed lines of experimentation in fruits, shrubs, etc., at the Industrial University. The belief seemed general that rapid results might be reached by seedling production and importing from like climates in the old world. But the story of the useful and suggestive things done and said at this meeting is too long for this column.

Buchu-paiba." Great Kidney and Urinary Cure. \$1.

We have just seen the new descriptive circular of the Porter Iron Roofing Co., of Cincinnati, Ohio. It is very handsome and contains the best of testimonials from every State and Territory. This company is the largest manufacturers of Iron Roofing and Corrugated Iron in the United States. Send for circular.

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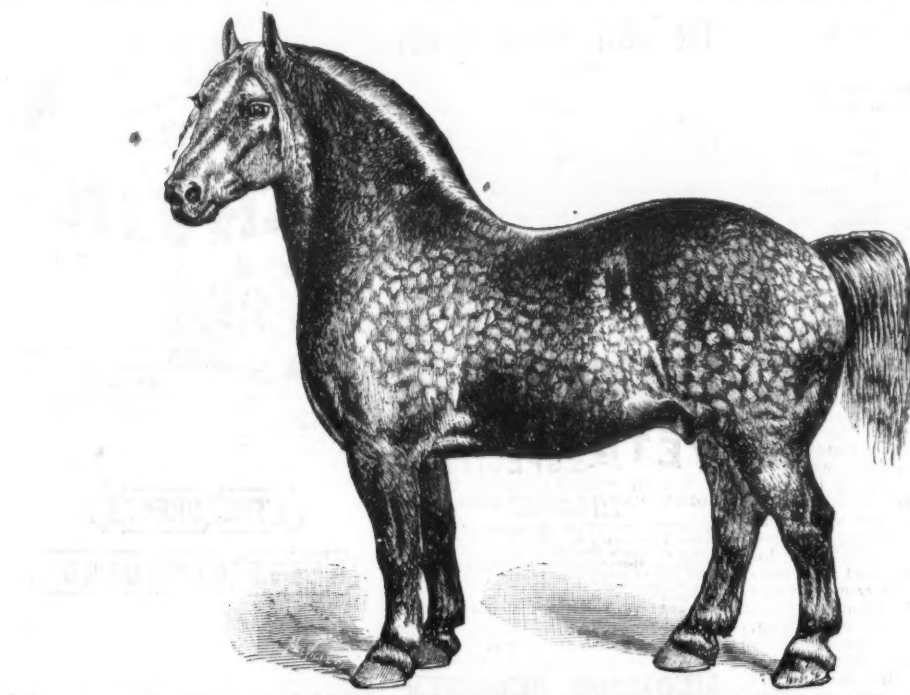
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"The fact is apparent to practical horsemen that horses have won them from colts and fillies, and that the latter have been put on their feet upward in death, without suffering any of the disabilities that have been referred to. The trainer or the most veteran roadie will not appeal to in vain for proof that in an ordinary harness race the colts and fillies are under their control, being affected by the judicious use of the over-check. Their windpipes have not been distorted, or their facial features distorted, as the result of the use of the results, so positively asserted, ever happened to them. They are as free from blindness as the horses that have been used in harness, than thousands of horses that have been permitted to become not only impatient but also vicious, and that have been agreeably willful through the undue freedom of a checkless bridle.

"The use of the over-check as well as the side-check has doubtless been abused. So has the horse been girt too tightly till his back has been sore, his ribs sore, and hitched too near the axle, till his legs have been severely bruised. The abuses of the check rein are not proved to be worthless. When intelligently used, it is a valuable part of the harness, and valuable portions of the harness ever invented.

Many an unruly colt has contracted the use



Norman Stallion, CROWN JEWELL, No. 2072, N. R. N. H. Imported by DILLON BROS., Normal, Illinois.

slightly, as well as vicious, habit of curving, or, in horse phrase, bucking his jaws down close upon his neck, so that the driver has no power to control him by pulling on the reins, though he may be endowed with herculean strength. All this exhibition of ugly rebellion can be subdued by raising his head to its proper position by means of the over-check. Horses without number have contracted the dangerous habit of pulling on the bit, by fastening the same rigidly between their molar teeth, so that the reinsman is powerless to control them, till, by means of the small bit attached to the over-check, they are brought into subjection; and much punishment is thereby spared both to themselves and to their drivers.

There are many horses, too, that will break and throw up their heads in idiotic confusion, despite the entreaties or threats of their drivers, till the over-check, with the accompanying standing martingale are brought into requisition. Then they will move along steadily like a finished road horse, in comparison with his performance before he was thoroughly broken, when his head and neck were free to follow his own turbulent volitions. No other part of the harness steadies the excitable or rebellious horse like the over-check rein, unless it may be the purely mechanical contrivance of toe weights. The late Hiram Woodruff gives a striking illustration of this fact in the management of the famous horse Kemble Jackson. He would thrust his head down and break continuously, rendering his great speed worse than useless, till his head was elevated by the singular form of over-check that has since his signal victory over him been styled the Kemble-Jackson over-check. Then he became steady, and his speed reliable, so that he could score easy victories over hitherto successful competitors.

But in addition to the over-check making many horses more pleasant to drive on the road, as well as more reliable on the turf, it has a greater value to those who have carefully studied the philosophy of its mechanical action. It is the most efficacious means of balancing the carcass and the action of the trotting horse that has ever been devised, with the single exception of the use of toe weights. The head and neck constitute unsupported weight that projects beyond the carcass. They have a direct agency in shifting both the centre of motion and the centre of gravity of the body; for, when the head is lowered, manifestly, these centres are drawn forward, and the hind parts are relieved, while the fore parts are correspondingly relieved. Now the carcass and consequently the action, of very few trotting horses is perfectly balanced, and the want of balance can be largely remedied by lowering or raising the head and neck, dependent upon the necessity of taxing the hind parts or the front parts. In no other part of the harness practice is so successfully followed by the most skillful trainers of the trotting horse, although they may have never fathomed its philosophy. The horse's head and neck can be raised or just such an angle that his greatest speed and endurance can be obtained, because his carcass and action are balanced. The over-check is raised or lowered a single inch, his body is thrown out of balance and his speed is seriously affected. This is a frequent occurrence on the turf.

A Challenge.

A. M. Studer, of Peoria, Ill., sends us the following for publication in the RURAL WORLD:

I am informed that there is an opinion existing in the minds of many intelligent disinterested horsemen of this section of the State, that the trotting stallion Durango, owned by me, is better than the trotter or stayer he has been represented to be by myself and others of his friends; or in other words, that he is a newspaper trotter that cannot show up in a contested race of heats with horses of tried and known ability, and that I have not the nerve to give the public an opportunity witness such a test of his qualities. How this opinion has been disseminated, how it originated, and who have most vigorously expressed it, I will not say, but what I think, leads me to here propose that I will match Durango to trot against Fairy Gift and George Sprague, or either of them, for \$500 each, mile heats, best three in five, at the Central Illinois Fair at Peoria, Ill., in the fall of 1884, \$250 each to be put up by the secretary of said association on or before the 15th of March, 1884, and \$250 each in the forenoon of the last Saturday preceding said fair. The race to be under the rules of the National Trotting Association, the first deposit of \$250 to be paid by the day and hour of race to be fixed by the officers of the Fair Association that it may take a proper place in their events, and the winning horse to take the entire stake. I have named Peoria as the place for meeting, as it is nearest a midway trotting point between the homes of Fairy Gift and George Sprague, and the place from natural location the centre of the rivalry of the three horses. However, if such location may seem an advantage to Durango, to remove any doubt which you may have, that I honestly desire a meeting of our horses, you may name the Chicago Driving Park, or the Lincoln (Ill.) Fair, in your acceptance. If you can agree upon the same point, the other conditions and time to remain as above stated. I have named March 15th as the limit of time for your acceptance, as that is about the beginning of the season and we can regulate their services therefor accordingly. I have proposed the amount to be put up by each as \$500, which is but a fraction of what my horse's stand services are worth to me, that we may go for a nominal wage while we each realized the stake in store for the turf performer. But if it may seem insufficient to both of you, I shall not object if you coincide in naming a reasonably larger amount.

I have endeavored in this proposition to impose no conditions difficult to accept or more favorable to one horse than the other, but in good faith and fairness to meet you

and demonstrate to the public if there is a newspaper trotter in the trio. And now if the necessities of hair-splitting in your consideration of this proposition should prevent our meeting let us not mislead the public as to where this sand deficit exists. Yours very respectfully,
A. M. STUDER.

Training Colts and Fillies.

Gov. Stanford, of California, by the success he has gained with his trotting stud, in eclipsing the records of the young trotters in "the States," has demonstrated that he knows something about developing young things at least. He thought colts required short and sharp work as soon as they were fitted for taking it, and making it even a part of their play. He began his work with his weanlings when such a thing as driving and riding was impossible. He had them given exercise daily in circular paddocks, made like regulation tracks, probably for weanlings not more than a sixteenth of a mile in length, and for yearlings these tracks were longer. There was no beating or whipping, but men were stationed around to keep up their gait. Mr. Jos. Cairn Simpson in describing these miniature tracks says they are carefully made, the short turns being well thrown up, and the material used easily kept sort. It is astonishing how readily the weanlings take to the work, and after the first flush of novelty has passed, and timidity overcome, they appear to enjoy the exercise nearly as much as a play in the fields. There is great difference in the aptitude shown to acquire the fast trotting step. Some will sail along with all the grace and speed that can be desired, others are prone to gallop until many lessons have been given. Whenever there is the slightest indication of fatigue, or even a lack of spirit, the play is stopped, and at the first sign only a few minutes are occupied with the instructions to each. During the exercise they are frequently brought to a stop, and started in a reverse direction. The other colts, yearlings and two-year-olds, are protected by boots, so that there is no danger of wounding the skin or knees, and this ring work is found beneficial to the elder as well as the youngsters. It is decided improvement over the old method of "lugging" (calonging), as it leaves the animals entirely free, whereas when circled on the run there is great danger of crossing the legs from the head being pulled to one side. There are several of these training paddocks at Palo Alto, so that a number of colts can be exercised at the same time, as this is necessary, as without that handy way of giving exercise, the large force of men and boys employed would have to increase three-fold.

The plan has advantages over leading by the side of a saddle horse. When led there is a propensity to play, and the young stallions are prone to be mischievous and troublesome to the horse which acts as chaperon. We have heard people argue that no reliable estimate could be made from the exhibition in the training paddocks, and that the colts, which showed the poorest there might turn out the best under control of the reins. This in a measure holds good with the ordinary "lot-trotting," but it is far from being correct when applied to the paddock work. In the lot there is no restraint, and the trotting step is usually taken when the animal feels like putting on a "heap of style." With tail curved to the back, distended nostrils, and eyes flashing with high spirit, the picture is pleasing, especially when the step is as steady as that of a tragedian, and many colts will receive credit for powers from such a display far beyond their true deserts. In the paddock there is more "business," for though the exuberance of high spirits may prompt to something of the same display, before long it is changed into settled work. The difference may be expressed by comparison with a child performing gleeful antics on the playground, and transferred from there to the tutelage of the dancing master.

As a general rule, the colts which have shown the best in the paddocks, have been the foremost on the track. Wildflower was particularly handy in her step, and Hinda Rose was the bright, particular star of the ring. Of all the colts we have seen exercise in this way at Palo Alto, Hinda Rose was the queen. Beyond any reasonable doubt she would show "close to a thirty gait" when a yearling, and when a weanling "better than a three-minute clip" was certainly within her capacity.

Great as the benefits of paddock-training are, the system of short, rapid work given nearly every day, has done its full share in perfecting the accomplishments of the Palo Alto youngsters. When inaugurated by Governor Stanford it met with opposition from nearly all the trainers of trotters, and who, in the confidence of their overweening self-esteem, predicted ignominy and failure. The Governor, however, had the "courage of his convictions," and could not be moved by assertions, no matter how dogmatically pronounced, that the system was wrong. He was in the East, and in order to control the younger drivers, barricades were erected on the track so that the regulation distance could not be exceeded. These were made something after the pattern of a hurdle, and could be set up or taken down with little trouble. There were advantages outside of confining the work to short brushes resulting from this. If an animal was uneasy there was no chance to give way to temper on the part of the driver, and lash and run the colt which had offended. The barricade was in the way, and the most hot-headed were aware that that was an obstacle which would surely bring them to grief if unable to pull up before reaching it.

BREEDERS' DIRECTORY.

STALLION FOR SALE.—Bay color, foaled S in 1880, by imported Imp, a full-blood Norman, dam Op. Doria, a first-class bay mare. Also Suffolk Swine, pigs ready for delivery in March. E. J. FILE, Hillsboro, Montgomery County, Ill.

W. M. J. MILLER, Breeder of Short-Horn Cattle, Percheron Horses and Berkshire Hogs, Turkey Hill Farm, Belleville, St. Clair County, Illinois.

H. B. SCOTT, Sedalia, Mo., breeder of Short Horn Cattle, Poland China Hogs and Improved Sheep. Anything in the herd for sale.

GUERNSEY CATTLE, Oxfordshire Sheep, Plymouth Rock Fowls, Pekin Ducks, White Holland Turkeys, all pure bred and low price. Henry C. Eckert, Belleville, Ill.

MERINO SHEEP and Light Brahmas, all of the best strains. R. T. McCullay & Co., Lee's Summit, Mo. Prices reasonable.

J. W. BLACKFORD, Bonaparte, Iowa, Breeder of and Shipper of Pure, Recorded Poland China Swine of best strains. Correspondence invited. Prices reasonable. Satisfaction guaranteed.

HEREFORD AND ABERDEEN-ANGUS CATTLE—Gudgell & Simpson, Importers and breeders, Independence, Mo. An inspection of their herds is invited.

SHORTHORN CATTLE—J. F. Finley, Breckinridge, Mo., breeder of Shorthorn Cattle and Berkshire Swine. Imported Kirklev. Lad at head of herd. Stock for sale at all times.

KANSAS SHORTHORN CATTLE—Robert A. Patton, Mo., breeder of Shorthorn Cattle of the best families. Stock for sale. Inspection invited.

JAMES H. PARKER, Columbia, Mo., breeder of Shorthorn cattle, Southdown and wooled sheep. Grand Duke of Sharon 2739 at head of herd. Prices reasonable.

ANGUS AND GALLOWAY CATTLE—W. H. A. and A. Leonard, Mount Leonard, Mo., Importers and breeders of Angus and Galloway cattle and Spanish and native Jacks.

D. W. MCQUITY, breeder of Merino sheep, of pure bred, high-class pedigree, and ewes, Hughesville, Pettis Co., Mo. Has 400 rams ready for this year's service.

CHARLES E. LEONARD, proprietor Ravenswood herd of Shorthorn Cattle, imported Spanish Jacks and Jennets and Merino Sheep, Bell Air, Cooper Co., Mo., or Princeton, Mo. R. R.

HIGH CLASS RATES CATTLE, bred and for sale by M. W. Anderson, Independence, Mo. Crags, Barringtons, Harts, Places Accombe, &c. Kirklevington Duke 2d 3280 at head of herd.

R. W. GENTRY, Sedalia, Mo., breeds and deals in Thoroughbred Merino Sheep of largest size and best quality. Rams and ewes always for sale at prices as low as the lowest.

T. C. LIPPITT, Shenandoah, Iowa, breeder of and dealer in American Merino sheep. Size, constitution and amount of cleaned wool a specialty. Stock rams for sale.

WILL R. & JUNIOR R. KING, Peabody, Marshall, Mo., breeders of Short-horn cattle. Viscount Oxford 7th, 4949, Imp., and Grand Duke of Clark, Jr., at head of herd.

PALMER, Sturgeon, Boone County, Mo., breeder of Short-horn cattle, Berkshires, and improved sheep. Fifth Duke of Aclim (Rose of Sharon) and Commander (pure) Booth at head of herd.

SAMUEL JEWETT, Independence, Mo., Importer and breeder of Berkshire swine, can Merino sheep. Satisfaction guaranteed to purchasers.

I. H. SHIMER, Hillsboro, Ill., Breeder of pure Victoria sheep. Satisfaction guaranteed. Inquiries promptly answered.

CHAS. F. MILLS, Springfield, Ill., Importer and breeder of Clydesdale horses, Jersey cattle, Cotswood sheep and Berkshire swine. Purity of blood and reasonable prices guaranteed.

W. T. HEARNE, Lee's Summit, Mo., on Mo. Pacific R. R., 24 miles east of Kansas City, breeder of pure bred Shorthorn Cattle of the highest type. Record numbers 100 head. Farm adjoins the town.

MERINO SHEEP—H. V. Pugsley, Plattsmouth, Neb., breeder of registered Merino sheep. Stubby 440 stands at head of flock. Call or write.

R. C. PEW, Prairieville, Pike county, Mo., Importer and breeder of Cotswood and Shropshire sheep. Ewes and rams of all ages for sale. Correspondence solicited.

P. S. ALEXANDER, Lone Jack, Mo., Importer and breeder of pure Victoria sheep. Satisfaction guaranteed. Call or write.

J. D. WASHINGTON, West Plains, Missouri, breeder and importer of Essex hogs, Merino Sheep and Plymouth Rock Chickens. Circulars free.

JOHN MORRIS, Chillicothe, Mo., breeder of Short-horn cattle, Berkshires, and improved Merino sheep. Stock for sale at reasonable prices. Write.

JACKS—I have for sale Jacks, Hogs, and hatched and thoroughbred Shorthorn bulls. W. H. BASS, Columbia, Mo.

JERSEY RED HOGS bred and for sale by Rozelle & Peck, Breckenridge, Caldwell County, Mo. Young pigs for sale.

J. BELL & SON, Summerville, Texas, county, Mo., breeders of pure Spanish Merino sheep. Choice ewes and rams at wholesale and retail.

G. B. BOWTHILL, Breckenridge, Mo., Breeder of Spanish Merino Sheep. His 32 best stock rams shear from 28 to 33 lbs. Stock for sale.

CHESTER WHITE HOGS, H. W. Tonkins, Fenton, St. Louis County, Mo., breeder of Improved Chester White pigs. Stock for sale at reasonable prices. Ship from St. Louis.

JOS. E. MILLER, Ellwood Stock Farm, Belleville, Ill., breeder of Holstein cattle, Shropshire sheep and Yorkshire swine.

DR. H. B. BUTTS, Louisiana, Pike county, Mo., breeder of Jersey cattle. Fifty head to select from. Send for catalogue. Also Bremen geese and Plymouth Rock fowls.

DR. ABRAM NEFF, Arrow Rock, Saline county, Mo., breeder of Short-horn cattle. Mammoth Duke at head of herd. Correspondence solicited.

CHENAUET TODD, Fayette, Mo., Breeder of Short-Horn Cattle, Cotswood Sheep, Sharon Geneva 10497 at the head of herd. Young bulls for sale.

GUS HEAD, MAPLE LAWN STOCK FARM, Alton, Ill., Breeder of Holstein Cattle, Poland China Hogs, Bronze Turkeys, Langhans and Plymouth Rock Chickens, Pekin Ducks and Scotch Collie Shepherd Dogs.

L. W. ASHBY, Locust Grove Herd, Calhoun, Mo., Breeder of Berkshire swine of the largest and best quality. Stock for sale. Correspondence solicited.

H. V. P. BLOCK, Aberdeen Farm, Pike Co., Mo., breeder of pure and high-bred Percherons by imported Napoleon Bonaparte and Bismarck, Champion Amick Trotters, pure Jerseys, grade Jerseys (milk cows), white Yorkshire and Berkshire pigs. Send for catalogue. Address Prairieville or Louisiana, Mo.

HERMAN ROESCH, St. Louis, Mo., Bird fancier and Pet stock breeder, will buy, sell and exchange High-class Poultry, Pigeons and pet stock. Has for sale: Dogs, Rabbits, Guinea-pigs, Ferrets, Maltese cats, Canaries, Red-birds, Mocking-birds. Eggs for hatching from 30 varieties of land and water fowls. Send stamp for price list. Address 4124 Fairfax Avenue, St. Louis.

SETH WARD & SON, Westport, Mo., breeders of the best families—Aldrie Duchesses, Fletchers, Barringtons, Kirklevings, Wild Eyes, Broom Duchesses, Hudson Duchesses, Constances, Minas, Hilpas, Darlington, Crags, Rose of Sharon, Vellums, Mazurkas, Miss Wileys, Barrington Hogs, Young Marys, Oxford of Vinewood 3d, 3247, at head of herd. Young stock for sale.

BERKSHIRES—N. H. Gentry, Sedalia, Mo., breeder of Berkshire hogs, Merino sheep and high-grade Short-horn cattle.

T. C. CAMPBELL, Breeder of Holstein Cattle, Manchester, St. Louis Co., Mo. Railroad station, Barrett's, Mo. Pac. Ry. Inspection of stock invited.

G. C. WRIGHT, Pacific, Mo., or 906 Pine St., St. Louis, Breeder of Jersey Cattle, Berkshires, Jersey Red and Victoria Hogs, Shepherd Dogs, Plymouth Rock, Georgia Short Neck Chickens, Toulouse, China and White Swan Geese, White Ducks, White Holland and Bronze Turkeys Eggs for hatching.

GEORGE L. MENGER, Palmyra, Mo., Breeder of pure bred Poland China Swine, all recorded in the A. P. C. Record. Special rates by express. Also, Breeder of pure bred Plymouth Rock Chickens. Eggs in season, \$1.50 per setting of 13. Write or call.

D. W. MCQUITY, breeder of Merino sheep, of pure bred, high-class pedigree, and ewes, Hughesville, Pettis Co., Mo. Has a specialty.

CHESTER WHITE AND BERKSHIRE HOGS, of the best breeds, bred and for sale by HOLT BROS., Arlington, Ky.

J. BAKER SAPP, Columbia, Mo., breeds a large English Berkshire Swine, Merino Sheep, Choice Plymouth Rock Fowls and Pekin Ducks. Catalogue free.

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DURO, OR JERSEY RED SWINE, bred and for sale by Dr. G. H. Donaldson, Breckinridge, Mo. For history and price-list address as above.

POULTRY, G. W. Pleasant, Wright City, Mo., breeds choice L. Bismarcks, P. Cochins, P. Rocks, W. Leghorns, Wyandottes, &c. Established 1871. Write for circular.

WOODARD & BRASFIELD'S —GRAND— COMBINATION SALE

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AT LEXINGTON, KY.

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This Sale will embrace 125 head, including choice representations of Trotters, Roadsters, Harness Pairs, Fancy Saddlers and Combined Horses. Also 75 Fine Jacks and Jennets. Catalogues on application.



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Our stud of horses cannot be excelled, and we will be pleased to have a call from you. One of our studs is now purchasing horses for Spring Sale, which will consist of as choice a lot of YOUNG HORSES as can be imported.

H. C. HEFNER & SON, BETHANY, MO.

Mention this paper.

A Jack for Sale.

Young, brown color, good breeder, and all right; 14 hands high, plenty of bone, and will give satisfaction to purchaser.

Address CHARLES L. HUNT, 1066 Pine Street, St. Louis, Mo.

Ashland.

STALLIONS FOR 1884.

The following stallions will make the season of 1884 at Ashland, adjoining the city of Lexington, Ky.:

DICTATOR, brown, 15-1/2 hands high, foaled 1865, got by Rysdyk's Hambletonian, 1st dam Clara by Society's American Star, second dam the McKinstry mare, the dam of Shark, record 2:27 3/4. Dictator is full brother to Dexter, record 2:17 1/4. Alma, record 2:28 3/4, and Astoria, record 2:29 1/2, trial 2:21 1/4, and he is the sire of Jay-Kyo-See, 2-yr old record 2:30 3/4, Phalaris, 6-yr old stallion record 2:15 1/2. Dictator, 6-yr old stallion, record 2:17 1/2. Service fee for the season \$80, cash.

KING RENE, bay, 15-1/2 hands high, foaled 1875, got by Belmont, 1st dam Hindiana (32e dam of Abdallah, Pim Patchett, &c.) by Manbrino Chief; second dam the Birch mare (the dam of Rosalind, record 2:21 3/4, and Donald, record 2:21 3/4, by Brown Pilot, the King Rene of the Future, 6-yr old record 2:27 1/4. He is very handsome, heartily tried and endowed with the power of transmitting his qualities in a remarkable degree. He has taken the champion premium for "the best stallion with three of his get," (the premium much coveted by breeders) whenever exhibited (6 times) at the Lexington, Louisville, Cincinnati, Ky., and Chicago, Ill., Fairs. Service fee for the season \$100, cash.

TRITON, (full brother to Trisket, record 2:14), bay, 15 hands high, foaled 1877, got by Princeps, 1st dam Ouida by Rysdyk's Hambletonian; 2d dam Morning Glory by Imp. Conteration; 3d dam by Estar; 4th dam Lady Clinton by Revolution; 5th dam Moggy by Imp. Don Donald; 6th dam by Manbrino Chief. He is a very handsome, heartily tried and endowed with the power of transmitting his qualities in a remarkable degree. He has taken the champion premium for "the best stallion with three of his get," (the premium much coveted by breeders) whenever exhibited (6 times) at the Lexington, Louisville, Cincinnati, Ky., and Chicago, Ill., Fairs. Service fee for the season \$100, cash.

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THE MODEL STOCK FARM,
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Key: 15 miles from Carthage the County Site and Queen City of the Southwest, three miles from Frisco R. R.—Trunk Line—two stations within five miles, 220 acres in cultivation, 70 acres in grass, remainder in orchards, lots etc. 1000 young trees just coming into bearing consisting of apple, peach, cherry planted pear. Small fruits in abundance for family use, grapes, blueberries, raspberries, gooseberries, huckleberries, strawberries. 56 acres in wheat, 50 acres broke for spring crops, balance corn stubble. Farm fenced with three barbed wire and ce

dar and iron posts. Artificial fish pond of about two acres well stocked with German Carp, Mirror and Scale. Good wind-mill and tanks for stock, hydrants in barn, yard and garden. Buildings—New frame one-story dwelling, 12 ft. wide, 24 ft. deep, 10 ft. high, 1303 sq. ft., 12 feet wall, 2 floors, room for 50 head of stock, 2000 bu. grain and 100 tons of hay. On tenant house with outbuildings. An inexhaustible supply of good water; beautiful lawn of about one acre surrounding the dwelling, bluegrass, evergreens and abundance of hardy flowers. In nearly seven year residence have never had a case of sickness in a large family. Improvements cost about

for selling. Will sell farming implements, grain and hay with farm. Possession given at once. Beautiful climate—thermometer ranges from 110 deg. above in summer to 10 deg. below zero in winter. For particular call on or address J. A. WILSON, Galesburg Jasper Co., Mo., Oronogo Station, St. Louis & Frisco R. R.

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1 Madison Plantation Mill, Rolls 20' long; 2 Defeating Tanks, 9000 galls. each fitted with steam, with all fixtures complete. Not owning steam power, offers it for sale. A BARGAIN. Just the thing for an outfit in central factory. Write for full description.

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FOR THOSE DESIRING TO SELECT A LOCATION FOR BUSINESS.—The report of the Stockton, Cal., Board of Trade contains much statistical and general information concerning the City of Stockton and the great San Joaquin Valley, of which it is the business centre. Sent free on application. N.M.O'R., Secretary of Board of Trade, Stockton, Cal.

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